



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,264	07/05/2006	Xianyi Chen	11005.0295-00000	2404
97664 7590 02/08/2011 Huawei Technologies Co., Ltd./Finnegan 901 New York Avenue NW Washington, DC 20001				
EXAMINER				
CALLAHAN, PAUL E				
ART UNIT		PAPER NUMBER		
2437				
MAIL DATE		DELIVERY MODE		
02/08/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,264

**Applicant(s)**

CHEN ET AL.

**Examiner**

PAUL CALLAHAN

**Art Unit**

2437

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. This Office Action is prompted by the Applicant's response filed 1-18-2011. Claims 1 and 3-13 are pending and have been examined.

### **Response to Arguments**

3. Applicant's arguments filed 1-18-2010 have been fully considered but they are not fully persuasive.

The Applicant argues in traverse of the rejection of the claims under 35 USC Sec. 103(a) as unpatentable over Marples et al., US 2003/0140142, and Piche et al., US 7,602,784. The Applicant asserts that the rejections are improper because the combination fails to teach the features of:

- a.) "...a trusted node further comprising a signaling channel selection unit, which is used to select a signaling transmission channel for transmitting the data so as to implement the convergence of signaling, and a call channel selection unit, which is used to select a media-stream receiving port in the trusted node for communicating with the internal network." The Applicant asserts that the reference used to teach these features, Piche, merely teaches one recipient computer transmitting the first external network

address and designated internal port information to another, transmitting computer. However, the Examiner respectfully counters that, assuming *arguendo* that the Applicant's characterization of Piche is correct, the claim language does not exclude such a recipient computer utilizing a signaling channel selection unit to send information to a transmitting computer in order to establish such a channel for the transmitting computer to utilize. Nor does the claim language exclude a recipient computer transmitting port information selected by a calling channel selection unit, to a transmitting unit for the transmitting computer to utilize. The Examiner maintains that Piche does teach a signaling channel selection unit and a call channel selection unit that selects a channel and port for its internal use and sends this channel and port information to a transmitting computer in order to establish a data stream to the recipient computer.

b.) "...select a signaling transmission channel for transmitting the data so as to implement the convergence of signaling." However, the Examiner maintains that Piche does teach this feature at, for example, col. 4 lines 53-55 where a recipient computer utilizes a signal channel selection unit to select a signaling transmission channel so as to implement the convergence of signaling. In the cited section, Piche teaches the recipient computer establishing many to one data stream reception, which the Examiner believes teaches such convergence.

The Applicant arguments asserting the patentability of the dependent claims based upon their dependence from the independent claims are addressed supra.

The balance of the Applicant's arguments are addressed via the application of new prior art. New grounds of rejection using Ormazabal et al., US 7,076,393 are presented infra.

### **Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

5. Claims 1, 6-8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marples et al., US 2003/0140142, and Piche et al., US 7,602,784.

As for claim 1, Marples teaches a network security system (abstract), comprising a firewall arranged between an internal network and an external network (fig. 2, element 222, [0014]), said firewall comprises a first port configured at the internal network oriented side of the firewall and a second port configured at the external network oriented side of the firewall (fig. 2 element 222, [0014]); wherein the network security system further comprises a trusted node arranged between the firewall and the external

network (fig. 2 element 200, [0014], [0015]: "...route the communications over the hub and through the firewall) which is used to provide a data channel between the internal network and external network ([0014], [0015]), and forward the data transported between the internal network and external network ([0014], [0015]), and wherein the trusted node further comprises a data forward unit, which is used to forward the data transported between the internal network and the external network ([0017]), and a control unit, which is used to control the operations of all the other units ([0014], [0015], [0017]). Marples does not teach the trusted node as comprising a media-stream receiving port used to converge the data from the second port. Marples also does not teach a trusted node further comprising a signaling channel selection unit, which is used to select a signaling transmission channel for transmitting the data so as to implement the convergence of signaling, and a call channel selection unit, which is used to select a media-stream receiving port in the trusted node for communicating with the internal network. However, Piche does teach these features. Piche teaches the use of such a first and second port for streaming media applications (col. 3 lines 15-20: streaming media is sent, col. 3 line 44 through col. 4 line 26: a method for port selection is taught useable with many to one streaming media transmissions). Piche teaches a signaling channel selection unit which is used to select a signaling transmission channel for transmitting the data so as to implement the convergence of signaling (col. 6 lines 52-65), and a call channel selection unit, which is used to select a media-stream receiving port in the trusted node for communicating with the internal network (col. 6 lines 52-65 and 66-67). Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to incorporate these features into the system of Marples. It would have been obvious to do so since this would allow for more rapid transmission of streaming media from an external network to the internal network of Marples, and increase the utility of the system of Marples by extending its use to commonly utilized network media delivery formats.

As for claim 6, this claim is directed towards the method that is carried out by the system of claim 1. Claim 6 recites substantially the same limitations as claim 1 and is therefore rejected on the same basis as that claim.

As per claim 7, Marples teaches the network security method according to claim 6, but not explicitly further wherein the Step B comprises the following: B1, Open Logical Channel signaling being transmitted by the internal network to the trusted node; B2, the trusted node informing the internal network of the selected media-stream receiving port; B3, the trusted node transmitting Open Logical Channel signaling to the external network to establish a corresponding channel. However, Piche does teach these steps (col. 3 line 44 through col. 4 line 25). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples. It would have been obvious to do so since this would increase the utility of the system of Marples by extending its use to commonly utilized firewall port discovery protocols.

As for claim 8, Marples teaches the network security method according to claim 6, but not explicitly further wherein the Step C comprises the following: C1, the selected media-stream receiving port of the trusted node receiving all the data from the internal network and forwarding the data to the external network; C2, the selected media-stream receiving port of the trusted node forwarding the data transmitted by the external network to the internal network. However, Piche does teach these steps (col. 3 line 44 through col. 4 line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples. It would have been obvious to do so since this would increase the utility of the system of Marples by extending its use to commonly utilized data packet transmission protocols.

As for claims 10-12, Marples fails to explicitly teach the feature of implementing load balance among a plurality of trusted nodes when the data are forwarded. However Piche does teach this feature (col. 4 lines 23-26 and 55-58: many to one transmission to, and reception at, a port on a client computer inherently utilizes load balancing). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples. It would have been desirable to do so since load balancing would allow for more efficient transmission of streaming media from an external network to the internal network of Marples, and hence increase the utility of his system.



6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marples and Piche as applied to claim 1 supra, and further in view of Ormazabal et al., US 7,076,393.

As for claims 3 and 4, the combination of Marples and Piche teaches the network security system according to claim 1, but not explicitly further wherein the trusted node is designed to support the H.323 protocol. However, Ormazabal does teach such firewall utilizing the H.323 protocol (fig 5, fig. 6, col. 6 lines 40-49, col. 10 lines 50-60, col. 14 lines 47-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples and Piche. It would have been obvious to do so since this would increase the utility of the system of Marples and Piche by extending its use to commonly utilized network media delivery formats.

7. Claims 5, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marples and Piche as applied to claims 1 and 6 supra, and further in view of Freebairn et al., US 2007/0067487 A1.

As for claims 5 and 9, the combination of Marples and Piche teaches the network security system according to claims 1 and 6, but not explicitly further wherein the signaling channel selection unit adopts Q931 channel for transmitting signaling. However, Freebairn does teach such a trusted node utilizing the Q931 protocol.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples and Piche. It would have been obvious to do so since this would increase the utility of the system of Marples and Piche by extending its use to commonly utilized signaling channel protocol.

As for claim 13, Marples fails to explicitly teach the feature of implementing load balance among a plurality of trusted nodes when the data are forwarded. However Piche does teach this feature (col. 4 lines 23-26 and 55-58: many to one transmission to, and reception at, a port on a client computer inherently utilizes load balancing). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Marples. It would have been desirable to do so since load balancing would allow for more efficient transmission of streaming media from an external network to the internal network of Marples, and hence increase the utility of his system.

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone

number for the organization where this application or proceeding is assigned is: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/PEC/  
AU2437

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art Unit 2437